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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/702,625	08/23/1996	HERMANN KLUTH	H1215/1556PC	6917
423	7590	11/17/2005	EXAMINER	
HENKEL CORPORATION THE TRIAD, SUITE 200 2200 RENAISSANCE BLVD. GULPH MILLS, PA 19406			COONEY, JOHN M	
			ART UNIT	PAPER NUMBER
			1711	
DATE MAILED: 11/17/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

08/702,625

Applicant(s)

KLUTH ET AL.

Examiner

John m. Cooney

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-36 and 40-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-36 and 40-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1005</u> . | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 10-13-05 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-36 and 40-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauls in view of Schmalsteig et al.(Canada) and Minato et al.

Pauls discloses preparations of polyurethanes dispensed from a pressure can for dispensing polyurethane foam materials wherein a foam precursor material comprising isocyanate group containing prepolymers having variable isocyanate group content values, blowing agents, catalysts, and other additives is stored under pressure and foamed upon release (see the entire document).

Pauls differs from applicants' claims in that it does not recite monomeric isocyanate contents of its prepolymers or particularly specify the removal of residual

Art Unit: 1711

monomeric isocyanate from its reactive components. However, CA-2,084,698 (hereon Canada) and Minato et al. (see both documents in their entireties) set forth that the means for removing excess monomer from isocyanate based reactive materials has long been known to the art for the purpose of reducing toxicity. Canada sets forth the more commonly recognized distillation method, and Minato et al. discloses the film evaporation methods. Accordingly, it would have been obvious for one having ordinary skill in the art to have reduced residual monomer contents of the prepolymers placed in the systems of the Pauls reference by the methods set forth by Canada and/or Minato et al. for the purpose of reducing toxicity in order to arrive at the systems, processes, and products of applicants' claims in the absence of a showing of new or unexpected results attributable to the reduction of the monomer contents of materials used.

Pauls differs from applicants' claims 66-68 in that it is not concerned with readying its cans for non-toxic disposal by reacting unreacted isocyanate with catalysts and or polyol. However, these are notoriously well known means of neutralizing unreacted isocyanate, and an ordinary practitioner with an interest in environmental concerns would have been prima facie motivated to make the monetary expense for additional materials to neutralize free isocyanate groups in the expended packs and ready them for disposal. The cited references disclose the various catalytic and other reactive means for accomplishing this isocyanate group neutralization through their disclosed isocyanate group reactions (see each of the documents in their entirety). Accordingly, it would have been obvious to use the conventional isocyanate group neutralizing materials disclosed by the cited references on the residues left in the

Art Unit: 1711

containers of Pauls for the purpose for the purpose of rendering the containers biologically safe in order to arrive at the processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

The following arguments were set forth in the Examiner's Answer mailed May 4, 2005, and are held to still apply:

"Appellants argue that an ordinary practitioner would not have the incentive to use the relatively expensive means for neutralizing excess isocyanate in the expended systems of Pauls. However, the fact that these efforts may be expensive relative to their environmental benefits has no bearing whether motivation is evident. An ordinary practitioner in the art would logically and obviously be directed towards using low toxic monomer containing prepolymers available to him in a prepolymer dispensing system if environmental integrity was at the forefront of his endeavors. Appellants' invention as claimed is utilizing that which is known to the art to the achievement of obvious ends and no invention in a patentable sense is seen. Interest in environmental safety is motivation to avoid toxic materials.

Appellants maintain that the cited references are from nonanalogous art. However, it is held that the determination that a reference is from a nonanalogous art is twofold. First, it is decided if the reference is within the field of the inventor's endeavor. If it is not, then it must be determined whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. In re Wood, 202 USPQ 171, 174; In re Clay, 23 USPQ.2d 1058. Disclosures of preparing isocyanate components for polyurethane synthesis having reduced monomeric isocyanate contents is at least pertinent to the endeavors of a referenced inventor who is using isocyanates in preparations of isocyanate components used in prepolymers which are dispensed from cans. The fact that the secondary references may not form foams does not negate their pertinence and relevance to the endeavor of preparing polyurethane products whose fundamental behaviors at a chemical level are not affected by the presence or absence of a blowing agent. Accordingly, it is maintained that an ordinary practitioner in the polyurethane arts would find the teachings of Canada and Minato et al. relevant and pertinent to the teachings of Pauls.

Appellants argue that the low monomer containing isocyanate based materials of Canada are solid. However, it is not seen that such is evident for the full disclosure of Canada, and, further, it is not seen that the materials encompassed by the full disclosure of Canada excludes liquid low monomer containing isocyanate based materials. Canada is maintained to be relevant and pertinent.

Art Unit: 1711

Rejection is maintained above for all of the claims, and no further arguments concerning individual claims, except as set forth below, are held to be needed.

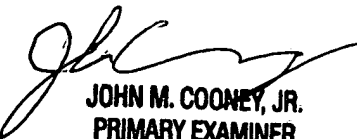
Examiner holds that the NCO content value range of 26-30% (present in claim 28 and 53 ) is not required by all claims, and, further, the Pauls reference discloses flexibility in control of NCO contents. Accordingly, variations in NCO content values is a variable which would have been within the practitioners expertise having the teachings of Pauls before them in order to arrive at the products and/or processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

The viscosity values of various appellant claims are not specifically recited by the teachings of the cited references. However, these are held to be inherent properties attributable to the liquid condition of the various materials of the instant concern, and patentability based on such a claim element is not seen nor have these values been associated with the patentability in the instant case."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY, JR.  
PRIMARY EXAMINER  
Group 1700